

+OK Reading Message  
Date: Mon, 12 Nov 2001 17:16:19 -0800  
Subject: PLOS business plan  
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Here's the business plan that I sent to VS.

If you have any comments or suggestions or edits, I would welcome them.

Pat

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Reject private control of the scientific literature.

<http://www.publiclibraryofscience.org>

Public Library of Science, a non-profit corporation, will publish scientific and medical research using a new business model that is intended to be financially sustainable and that results in the published work being freely available for use and distribution in the public domain. We aim not only to provide a high-quality vehicle for publication of scientific work, but also to establish the financial feasibility of this business model, so that it can be emulated by scientific societies that publish their own journals.

The basic plan is to launch, by mid-2002, (i.e. within 6 months) a group of new journals that will:

1. Publish scientific and scholarly papers online.
2. Maintain high quality standards in editing and production.
3. Provide rigorous peer-review.
4. Archive the published papers as XML documents that conform to the PubMed Central DTD, so that conversion to new digital formats can be carried out by a single conversion script. (PMC has devoted a lot of effort to this archiving issue).
5. Distribute the published work to PubMed Central and other public distributors and repositories, including university libraries, etc.
6. Fund its operations by means of a combination of charges to authors, grant support from charitable organizations, Universities, and perhaps corporations who might benefit from freer access to the scientific literature.
7. Grant to the public domain an irrevocable license for unrestricted public distribution and use of the published work, requiring only proper citation of the original work.
8. Post an open record of all business operations, so that our efforts can serve as an experiment in testing a new business model for scientific publication.

The details of the organization and business plan will evolve over the next few months and further evolve as we gain experience. We are devoting most of our efforts now to raising the funds we need to pay for the assistance and advice we will need in formulating and evolving this

plan, and to cover the start-up and initial operating costs of our publication initiative. Our current working business plan and proposed model for the journal operations is outlined below:

Journal organization and process flow:

The publisher will be a non-profit corporation called "Public Library of Science" - a public-benefit group of scientists working for the benefit of scientific progress, education and the public good.

The organization of the Public Library of Science journals is still under active discussion. Plans are likely to evolve considerably over the next few weeks and thereafter. What is important is that we will do our best to set up a system that will satisfy the needs of as many scientists as possible. Our current working model is as follows:

The journals will be organized in a simple hierarchical fashion. Currently we envision 2 layers. The top layer will consist of between two (eg., Public Library of Medicine? and Public Library of Biology, and perhaps 6 (eg., Public Library of Medicine, PLoS Chemical Biology, PLoS Molecular Biology, PLoS Cell Biology, PLoS Organismal Biology, PLoS Behavior), journals which will publish those articles that are deemed not only to be deserving of publication, but to be of unusual interest or importance to a reasonably broad audience (articles that might otherwise be published, say, in Nature, Science, Cell, PNAS or a top specialty journal). I lean more toward starting with just two titles, and dividing if the quality and volume warrant it. Within each journal title, articles could be organized into subsections by topic (in PNAS fashion), and if the number of articles was unmanageable (depending on cycle of publication of new nominal "issues", authors could choose to see a table of contents focused only on their own interests. These two journals would include short timely reviews, commentary on current papers (a la "news and views"), essays and news.

The second layer would consist of the same categorical division, with a suffix (eg. Public Library of Medicine: Reports, Public Library of Biology: Reports), and would publish reports that are deemed worthy of publication, but less "newsworthy". I would like to try to include some reviews and commentary highlighting selected papers in each issue in these journals also, to make them more attractive and useful to readers and authors.

One feature that I would like to consider would be to have the authors submit with their manuscript a ca. 500 word (+ 1 or 2 simple illustration) piece that summarizes the work and explains its significance - or what the authors think it means - in language that an interested high-school or college student could understand (at the level of the NY Times' "science times"). This piece would be reviewed and edited with the same care as the primary article, and could be useful not only to make the scientific literature more accessible to the non-professional scientist, but even to help scientists browsing or searching for information, as one level beyond the abstract. We might even, in some cases, encourage authors to provide a sound clip or mpeg movie of the authors explaining or showing something about their work. Photos of authors would be a nice feature anyway.

We expect that this working plan for the organization of the journals will evolve as we engage a wider group of scientists in the planning.

Review and publication mechanism: Authors will be asked, when they submit their papers, to indicate which of the PLOS journals they believe to be the appropriate venue for their work (eg., for case reports, brief specialized notes...). The referees and editors will also be asked in their review to make a recommendation as to which PLoS journal is appropriate for an accepted paper. Obviously, some authors might be happy to have their work published in the "Public Library of Medicine", say, but shun publication in "Public Library of Medicine: Reports". This will be an important challenge.

Submissions will be electronic, and authors will be asked to prepare their manuscripts using a standard but flexible template (which we will provide at the PLoS website), to facilitate conversion of the submitted work to an XML document.

The peer review process will aim to: 1. decide whether the work is scientifically rigorous, intellectually honest, and presented and written clearly enough to be useful to its intended audience. (i.e. decide whether this article deserves to be published anywhere at all). 2. Decide what audience would benefit from reading the article, a judgement that currently would amount to deciding which journal it belongs in. This decision is multifactorial and subjective, and based on the quality, importance, timeliness, the breadth of its implications, etc. This second decision will determine which "layer", and sometimes, which discipline-specific title, would be most appropriate. We have already begun efforts to organize a top-notch editorial group and a large group of committed reviewers, starting with the outstanding scientists who have signed the PLOS open letter, but also relying on their leadership to reach out to a much larger group of colleagues to recruit them as editors and reviewers.

The archival version of the published work, to which citations will point, will be the XML document residing at the National Library of Medicine, available from the PubMed Central server, and presumably numerous mirror sites and secondary distributors, as well as from the PLoS website. Each report will be rendered as an HTML document for direct viewing on the Web, and as a PDF for viewers who want to produce a paper copy. The Citation format will be, eg.: Public Library of Science Behavior 2(1): 1-10.

We will actively explore the possibility of publishing printed versions of these journals and providing them to libraries and other institutions (and individuals) at a prices that cover the marginal cost of printing and distribution.

Our practical agenda in the next couple of months includes:

1. Establish a non-profit corporation called the Public Library of Science. Done - we're a legally chartered non-profit, but we still need to file forms for tax-exempt status.
2. Obtain grant(s) for initial funding to cover start-up costs. See (confidential) letter to Gates Fdn., which Harold will hand-deliver tonight to the Exc. Dir. We're also meeting with a director of the Moore Fdn tomorrow.
3. Organize several hundred committed volunteer scientists to commit time to setting up an editorial infrastructure for the journal, advising us on the design and operation of the journal, and recruiting their friends and colleagues to help and support the journal.
4. Work with these volunteers to establish an editorial system and

appoint editorial boards for each of the journals.

5. Hire a managing editor with experience.
6. Hire a full time administrative assistant.
7. Retain one or more legal advisors with experience in non-profit organizations and copyright/publishing issues (we will presumably need a few dozen hours of legal advice along the way).
8. Retain business advisors to review our business plan and advise us on accounting.
9. Retain a graphic designer to advise us on developing the look of the journal and help us prepare posters, etc. for our grass roots advertising campaign.
10. Begin a grass roots advertising campaign to build confidence and interest in PLOS and to establish a name and presence. The basic idea will be to use email to send out poster images that supporters at every institution can print out and post widely at their local institutions. Since this is a grass-roots, scientists' initiative, we are in a unique position to call on our supporters to advertise for us, as we have successfully done with the open letter (unlike any ordinary start-up journal, which can't call on thousands of supporters to do its advertising).

Budget (for first year):

#### A. Fixed infrastructure costs

##### 1. Personnel:

Position	Salary and Benefits
Managing Editor	\$180,000
Associate Editor	\$150,000
Business Manager	\$120,000
Programmer and IT person	\$100,000
Administrative Assistants (2)	\$100,000
Copy editors (2)	\$100,000

##### 2. Consultants:

Legal assistance	\$ 20,000
Business consultants	\$ 50,000
Graphic Designers	\$ 10,000
Accountant	\$ 10,000

##### 3. Miscellaneous Fees

Licenses	\$ 2,000
Telephone bills	\$ 2,000
Insurance	\$ 20,000
Utilities	\$ 10,000

##### 4. Publishing services contract

One-time start up cost	\$100,000
Annual fee	\$100,000

##### 5. Equipment

Computers/internet server/software	\$ 40,000
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##### 6. Office expenses

Office space rental	\$ 45,000
Office furnishings/equipment	\$ 40,000
Office supplies and mail	\$ 20,000

7. Promotional costs	\$ 10,000
8. Travel	\$ 20,000
Sub Total:	\$1,249,000

(continued)

B. Additional operating expenses and income that will scale with the success of the Public Library of Science project:

Publishing contractor fees:  
\$300 per published report

It is difficult to estimate how many reports we will publish in the first year of operation. Last year, more than 400,000 articles were published in scientific journals with a major focus on biology and medicine. If 2.5% of these articles were to be published by the Public Library of Science in a year of operation, then these fees would total \$3,000,000.

We are presently planning to charge \$300 per published article, and to waive this charge for authors who cannot afford to pay. If we assume that 20% of authors will ask for a waiver, then our total income from author fees will be \$2,400,000, a deficit of \$600,000. Because of the unavoidable uncertainties in these financial projections and expected numbers of submissions, we are budgeting for a deficit of \$750,000 in publishing fees in the first year. Our plan is to accept a deficit of this magnitude in the first year of operation, and to adjust the author charges over time as needed to balance the budget in future years. We believe it will be possible to achieve a balanced budget by modest increases in charges to \$400-500 per article.

\$750,000

Grand total: \$1,999,000

We intend to recover our expenses through a combination of charges to authors and subsidies from grants, which we will solicit from foundations (like HHMI, Gates, Wellcome, SPARC, Moore, Soros, Case), Universities and research libraries, public sources and private corporations. We believe that we can keep the author charges competitive with other journals (for comparison, ASM charges \$75-151 per published page, for an average of more than \$500 per published paper). Preliminary investigation into the costs suggest that our author charges will eventually be in the range of \$200-500 per published paper (depending on the level of grant support we can obtain, and the degree to which we pay commercial providers for the mechanics of production). We certainly need an initial grant to serve as a buffer so that we can keep the charges as close as possible to the break-even rate without running the risk of going bankrupt. I would estimate that we will receive at least 1,000 and perhaps 10,000 submissions. This would correspond to expenses of \$300,000 to \$3,000,000 on top of our fixed infrastructure costs. If we approach the higher figure, this will mean that the enterprise is succeeding sufficiently well that we will probably have some latitude to increase the author charges, and a better position for soliciting grants, if needed to balance the books.

An important issue to resolve is how we will handle copy editing. One idea that we are exploring is to have the organized groups of librarians that support this initiative to offer to provide in-kind support in the form of copy-editing assistance. Alternatively, we will have to hire permanent staff to handle this responsibility, and cover the costs with additional author charges.

Space: If we figure on needing around 1500 square feet of office space (reasonable?), near either Berkeley or Stanford, our rent is likely to be on the order of \$2500-\$3500/month.

Financial management: We propose to keep our financial records open, and post them online so that they can serve as a resource for other publishers who might wish to consider this business model. We will hire an independent accountant to audit our financial records on an annual basis and post the report online.

 PLOS\_publishing\_initiative.rtf